

Remarks

The specification and claims have been revised to overcome the Examiner's various rejections under paragraph nos. 1-4.

The Examiner considers that the subject-matter of the independent claims 1 and 10 would be obvious under 35 U.S.C. 103(a) over Frodigh in view of Teder.

Frodigh (US 6,681,458) discloses a system and a method in which the access network loading, which is the loading between one or several base stations and a radio network controller, is taken into account in the soft handoff algorithm. When the access network loading reaches a predetermined threshold, parameters (line margins) used by the soft handoff algorithm handled by the considered base station(s) is adjusted to limit the number of soft handoff communications with this base station (col.6, 1.29-45 and Fig. 3). A mobile station entering an area covered by said base station may thus not receive any transmission from it (col.6, 1.40-45).

The method of Frodigh thus permits to limit the number of new soft handoff connections or to reduce the number of soft handoff connections with regard to one or several particular base stations (col.6, 1.65 – col.7, 1.3). It must be noted that the modification of the soft handoff margins indifferently concerns all the mobile stations which communicates or may communicate with said base station(s).

On the contrary, Claim 1 of the present application recites a method in which a given mobile station is configured to operate in a macrodiversity mode (which includes "soft handoff") and in which said mobile station is controlled to receive signals from one or several base stations after specified conditions have been fulfilled, thereby renouncing to the macrodiversity mode. Claim 1 is hereby amended to make this point clearer.

The present invention thus concerns a macrodiversity control on a mobile station basis. Indeed, upon detection that the specified conditions have been fulfilled, the considered mobile station is requested to change its way of operating, so that its receiving units can process the signals coming from said base station(s).

Among the specified conditions used in the present invention to trigger a macrodiversity renouncement, there are for example: a saturation of the code resources which can be allocated in certain cells (such code resources are radio resources and must not be confused with the access network load which is measured between base stations and an access network controller), the fact that a communication of the considered mobile station is already subjected to another diversity technique like repetition, or the fact that the macrodiversity gain is relatively low on a down link (see page 15, 1.16-31).

With the invention, it is thus possible to request a given mobile station to receive different signals e.g. when macrodiversity does not contribute substantial gains.

It is clear that the change of the soft handoff margins disclosed in Frodigh does not allow such possibility, since Frodigh only envisages to limit the number of soft handoff on a set of base stations basis depending on a single criterion which is the access network loading.

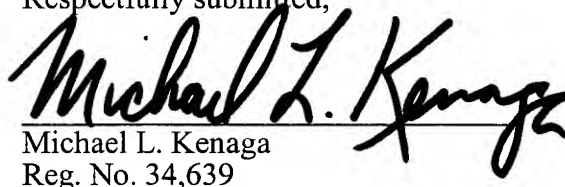
Teder (US 5,828,659) does not give any useful additional teaching to obtain a macrodiversity control as defined in the present invention.

It is thus believed that the subject-matter of Claim 1 and Claim 10 is novel and non-obvious over Frodigh, even in view of Teder. The other claims 2-9 and 11-18 are acceptable as well, in particular since they include all the features of either Claim 1 or Claim 10. As for Claim 19, we note with satisfaction that the Examiner considers it as acceptable as such. This

should be an indication that the other independent claims are patentable as well, since Claim 19 more or less recites means to implement the method of Claim 1.

Favorable consideration and prompt allowance of the application are respectfully requested.

Respectfully submitted,


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